UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,722	07/31/2001	Kyoung Sup Shin	P-0247	1247

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EXAMINER
QUIETT, CARRAMAH J

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 January 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7,10,13 and 16-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7,10,13 and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2001 and 28 March 2005* is/are: a)☒ accepted or b)☐ objected to by the
Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 1/11/2006 has been entered.

Response to Amendment

2.   The amendment(s), filed on 1/11/2006, have been entered and made of record. Claims 1-

2, 7, 10, 13, and 16-20 are pending.

Response to Arguments

3.   Applicant's arguments filed 1/11/2006 have been fully considered but they are not

persuasive.

        With respect to Kuchta, the Applicant asserts that Kuchta does not teach an image signal

transmitting/receiving apparatus or method that includes checking whether a cut-off mode has

been set for the main image signal. Particularly, the Applicant asserts that the selection routine

112 is not a cut-off <u>mode</u> and is not checking whether a cut-off mode has been set for a main

image signal. The Examiner respectfully disagrees. Kuchta's cut-off mode is the operator-

designated selection routine (fig. 3, ref. 112) can be set to display the low resolution image signal

on the monitor (ref. 116) via the selector (ref. 104) and the D/A converter (ref. 114). When the

selector (ref. 104) receives the selection routine, this selection assists the user with transmitting

the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A

converter [ref. 114]). In other words, the selection routine controls the type of image to be

transmitted to the display (Kuchta, col. 7, lines 24-33). Respectfully, the terms mode, determine,

selection, and control are each synonymous to each other.

With respect to Szajewski, the Applicant asserts that "[the teaching of Szajewski] is not

transmitting and displaying during telephonic communication, a sub-image signal instead of a

main image signal in case that a cut-off mode is set, as recited in the claims of the present

application." The Examiner respectfully disagrees. Kuchta is used for teaching transmitting and

displaying a sub-image signal instead of the main image signal in case that the cut-off mode is

set (col. 7, lines 4-58). Szajewski is used for teaching a method for transmitting and displaying,

(inherently) during telephonic communication (col. 10, lines 6-46). The communication module

46 transmits the image signals via a telecommunication network to devices such as an Internet

appliance, a personal digital assistant and a television. Devices such as these inherently have

displays. When an image signal is transmitted and displayed on such devices via a

communication path such as the Internet, it is well known in the art to utilize telephonic

communication for accessing the Internet.

Additionally, the Applicant asserts that, "Szajewski does not disclose or suggest anything

related to a telephonic communication. Szajewski merely discloses that digital data may be

transmitted from the imaging system using a communication module through a network to

another device such as a telephone." The Examiner asserts that telephonic communication

means using a communication module through a network to a telephone. In other words, a telephonic communication means telecommunications.

Lastly, the Applicant asserts that none of the cited references disclose or suggest where the sub-image is one of a signal inputted by a user or a previously transmitted main image signal and is stored in a predetermined storing area. The Examiner respectfully disagrees. The U.S. Patent and Trademark Office considers Applicant's "or" language to be anticipated by any reference containing one of the subsequent corresponding elements. As illustrated in figure 1A, Kuchta states that a user can input a request (signal) to the processor (ref. 20), which sends a signal to the digital signal processor (ref. 22) to display the thumbnail (sub-) image signal (col. 4, lines 54-67). In figure 3A, Kuchta further illustrates an operator-designated selection routine (ref. 112) where a user can input or request a thumbnail (sub-) image signal to be displayed (col. 7, lines 4-33). In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image signal is a previously transmitted main image signal because the image signal does not separate into a low and high resolution until the signal undergoes discreet cosine transform (ref. 33). Please read col. 5, lines 7-35. In col. 4, lines 53-67, it states that the thumbnail (sub-) image signals are stored in a multi-format image file of the memory card (ref. 24) with an area for thumbnail and the same for the full resolution image. Please see figs. 2A and 2B.

Accordingly, Examiner submits that the rejections to amended claims 1-2, 7, 10, 13, and 16-20 are respectfully maintained with respect to the prior art used in the previous Office Action.

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5.   **Claims 1-2, 7, 10, 13, and 16-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchta et al. (U.S. #5,164,831) in view of Szajewski et al. (U.S. #6,801,719).

As for **claim 1**, Kuchta teaches an image signal transmitting/receiving method, in figure 3A, comprising the steps of:

- transmitting/receiving a main image signal; the memory card (ref. 24), which stores image signals from figures 1A and 1B, transmits a high resolution (main) image signal to the connector (ref. 100), which receives a high resolution (main) image signal. Please read col. 7, lines 4-10 and col. 4, lines 53-67.

- determining whether a cut-off mode has been set for the main image signal; as explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it determines whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- transmitting and displaying a sub-image signal instead of the main image signal in case that the cut-off mode is set. As explained in col. 7, lines 4-58, after the memory card (ref. 24) transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102), the low resolution (sub-) image signal is sent to the selector (ref. 104). The operator-

designated selection routine (ref. 112), which is the cut-off mode, can be set to display the

low resolution image signal on the monitor (ref. 116) via the selector (ref. 104) and the D/A

converter (ref. 114).

- transmitting and displaying the main image signal instead of the sub-image signal in case that

  the cut-off mode is not set. As explained in col. 7, lines 4-58, after the memory card (ref. 24)

  transmits the image signals to the connector (ref. 100) and then to the file decoder (ref. 102),

  the high resolution (main) image signal is sent to the selector (ref. 104). Inherently, when the

  operator-designated selection routine (ref. 112) is not set for a low resolution image the high

  resolution image signal is displayed on the monitor (ref. 116) via the selector (ref. 104) and

  the D/A converter (ref. 114).

- wherein the sub-image signal comprises one of a signal *inputted by a user*[1] or* a previously

  transmitted main image signal and is stored in a predetermined storing area[2]. [1]As illustrated

  in figure 1A, Kuchta states that a user can input a request (signal) to the processor (ref. 20),

  which sends a signal to the digital signal processor (ref. 22) to display the thumbnail (sub-)

  image signal (col. 4, lines 54-67). In figure 3A, Kuchta further illustrates an operator-

  designated selection routine (ref. 112) where a user can input or request a thumbnail (sub-)

  image signal to be displayed (col. 7, lines 4-33). [2]In col. 4, lines 53-67, it states that the

  thumbnail (sub-) image signals are stored in a multi-format image file of the memory card

  (ref. 24) with an area for thumbnail and the same for the full resolution image. Please see

  figs. 2A and 2B.

However, Kuchta does not expressly teach a method for transmitting and displaying during

telephonic communication. In the same field of endeavor, Szajewski teaches a method for

transmitting and displaying, during telephonic communication (fig. 1, ref. 46), a sub-image

signal (col. 10, lines 6-52). In light of the teaching of Szajewski, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify the method of

Kuchta with a means for transmitting and displaying, during telephonic communication in order

to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 2**, Kuchta further teaches a method, in figure 3A, wherein the main image signal is

a received image signal. The connector (fig. 3A, ref. 100) receives the high resolution (main)

image signal from the memory card (ref. 24), which stores image signals. Please see figs. 1-2

and read col. 7, lines 4-10 and col. 4, lines 53-67.

Regarding **claim 7**, Kuchta discloses an image signal transmitting/receiving apparatus, in

figures 1A and 3A, comprising:

- an image signal processor (fig.1, ref. 22) for processing a main image signal (col. 3, line 22-
  col. 4, line12);

- a display unit (fig. 3A, ref. 116) for displaying the received main image signal (col. 7, lines
  30-33);

- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image
  signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can
  be selected via an operator-designated selection routine (ref. 112). This selection routine
  (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection
  routine, it checks whether to send the high resolution (or low resolution image) signals to the
  monitor (ref. 16) (via the D/A converter [ref. 114]).

- an image signal selector (ref. 104) for selectively outputting a sub-image signal instead of the main image signal to *the image signal processor* or* the display unit *in case that the cut-off mode has been set* or* outputting the main image signal to the image signal processor in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- wherein the sub-image signal comprises one of a signal stored by a user or* a *previously transmitted main image signal.* In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image signal is a previously transmitted main image signal because the image signal does not separate into a low and high resolution until the signal undergoes discreet cosine transform (ref. 33). Please read col. 5, lines 7-35.

However, Kuchta does not expressly teach an image signal selector for outputting during a telephonic communication. In the same field of endeavor, Szajewski teaches outputting, during a telephonic communication (fig. 1, ref. 46), a sub-image signal. In light of the teaching of Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image signal selector of Kuchta for outputting during a telephonic communication in order to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 10**, Kuchta further discloses an image signal transmitting apparatus, in figures 1A and 3A, comprising:

- an image signal processor (fig.1, ref. 22) for processing a main image signal (col. 3, line 22-col. 4, line12);

- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- an image signal selector (ref. 104) for outputting a sub-image signal instead of the main image signal to the image signal processor *in case that the cut-off mode has been set*, or* outputting the main image signal to the image signal processor in case that the cut-off mode has not been set. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- wherein the sub-image signal comprises one of a signal stored by a user or* *the main image signal that has been previously transmitted.* In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the

digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image

signal is a previously transmitted main image signal because the image signal does not

separate into a low and high resolution until the signal undergoes discreet cosine transform

(ref. 33). Please read col. 5, lines 7-35.

However, Kuchta does not expressly teach an image signal selector for outputting during a

telephonic communication. In the same field of endeavor, Szajewski teaches outputting, during a

telephonic communication (fig. 1, ref. 46), a sub-image signal. In light of the teaching of

Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the image signal selector of Kuchta for outputting during a telephonic

communication in order to evaluate images for composing the image (col. 11, lines 8-21).

As for **claim 13**, Kuchta discloses an apparatus, an image signal receiving apparatus, in

figures 1A and 3A, comprising:

- an image signal processor (fig.1, ref. 22) for processing a main image signal (col. 3, line 22-
col. 4, line12);

- a display unit (fig. 3A, ref. 116) for displaying the received main image signal (col. 7, lines
30-33);

- a controller (ref. 112) for checking whether a cut-off mode has been set for the main image
signal. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can
be selected via an operator-designated selection routine (ref. 112). This selection routine
(ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection
routine, it checks whether to send the high resolution (or low resolution image) signals to the
monitor (ref. 16) (via the D/A converter [ref. 114]).

- an image signal selector (ref. 104) for *outputting a sub-image signal instead of the received main image signal to the display unit in case that the cut-off mode has been set*, or* outputting the main image signal to the image signal display in case that the cut-off mode has not been set.. As explained in col. 7, lines 4-58, a high/low resolution (main/sub) image signal can be selected via an operator-designated selection routine (ref. 112). This selection routine (ref. 112) is considered a cut-off mode. When the selector (ref. 104) receives the selection routine, it checks whether to send the high resolution (or low resolution image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

- wherein the sub-image signal comprises one of a signal stored by a user or* *a previously transmitted main image signal*. In figure 1A, when the image signal enters the compression and recording section (ref. 4) from the input section (ref. 2), the image signal is in full (high) resolution (col. 1, line 29 – col. 2, line 67). As the image signal enters the digital signal processor, Kuchta further explains the processing in figure 1B. The sub-image signal is a previously transmitted main image signal because the image signal does not separate into a low and high resolution until the signal undergoes discreet cosine transform (ref. 33). Please read col. 5, lines 7-35.

However, Kuchta does not expressly teach an image signal selector for outputting during a telephonic communication. In the same field of endeavor, Szajewski teaches outputting, during a telephonic communication (fig. 1, ref. 46), a sub-image signal. In light of the teaching of Szajewski, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image signal selector of Kuchta for outputting during a telephonic communication in order to evaluate images for composing the image (col. 11, lines 8-21).

For **claim 16**, Kuchta, as modified by Szajewski, discloses a method further comprising

setting the cut-off mode; as explained in Kuchta, col. 7, lines 4-58, a high/low resolution

(main/sub) image signal can be selected via an operator-designated selection routine (ref. 112).

This selection routine (ref. 112) sets the cut-off mode. When the selector (ref. 104) receives the

selection routine, it checks whether to send the high resolution (or low resolution image) signals

to the monitor (ref. 16) (via the D/A converter [ref. 114]).

For **claim 17**, Kuchta, as modified by Szajewski, discloses a method wherein the cut-off

mode is set (Kuchta, col. 7, lines 4-58). However, Kuchta and Szajewski do not expressly

discloses a method wherein the cut-off mode is set during telephonic communication. The

Examiner takes Official Notice that it is well known in the art to set the cut-off mode during

telephonic communication. Therefore, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to provide a method for setting the cut-off mode during

telephonic communication in the imaging devices of Kuchta as well as Szajewski so that a user

can not only communicate in an ordinary manner, but also may view a displayed image. This

modification would also provide the compressed transmitted images with a constant data rate.

For **claim 18**, Kuchta, as modified by Szajewski, discloses a method further comprising a

device for setting the cut-off mode; as explained in Kuchta, col. 7, lines 4-58, a high/low

resolution (main/sub) image signal can be selected via an operator-designated selection routine

(ref. 112). This selection routine (ref. 112) sets the cut-off mode. When the selector (ref. 104)

receives the selection routine, it checks whether to send the high resolution (or low resolution

image) signals to the monitor (ref. 16) (via the D/A converter [ref. 114]).

Regarding **claims 19-20**, these claims are apparatus claims corresponding to the method

claims 17-18, respectively. Therefore, claims 19-20 are analyzed and rejected as previously

discussed with respect to claims 17-18, respectively.

***Note:** The U.S. Patent and Trademark Office considers Applicant's "or" language to be

anticipated by any reference containing one of the subsequent corresponding elements.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316.

The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJQ
Jan. 20, 2006

NGOC-YEN VU
PRIMARY EXAMINER